

III. CLAIM AMENDMENTS

1. (Currently Amended) An optical wavelength control system for an optical source—(LD), the system including:

a beamsplitter arrangement—(9, 10, 12) for propagating radiation from said source—(LD) over two paths,

first—(1) and second—(2) photodetectors each arranged in a respective one of said two propagation paths,

a wavelength selective optical filter—(3) interposed in the propagation path from said source—(LD) to said first photodetector—(1), whereby said first—(1) and second photodetector—(2) are adapted to generate photocurrents indicative of the possible displacement of the actual wavelength of the radiation from said source—(LD) with respect to a reference wavelength and the power emitted by the optical source, respectively, and

~~characterized in that the system includes a support bench (7) extending in a given plane and,~~

wherein said beamsplitter arrangement—(9, 10, 12) is arranged to split said radiation from said source—(LD) towards said first—(1) and second—(2) photodetectors in a direction substantially perpendicular said given plane of said bench—(7).

2. (Currently Amended) The system of claim 1, ~~characterized in that~~wherein said wavelength selective optical filter—(3) is mounted over said beamsplitter arrangement—(9, 10, 12) whereby and said beamsplitter arrangement, said optical filter—(3) and said photodiodes—(1, 2) comprise an assembly extending in a

direction substantially perpendicular said given plane of said bench—(7).

3. (Currently Amended) The system of ~~either of claims 1 or 2, characterized in that~~ claim 1, wherein said beamsplitter arrangement—(9, 10, 12), said optical filter—(3) and said photodiodes—(1, 2) comprise an assembly having an associated a frame—(100) carrying said beamsplitter arrangement—(9, 10, 12), said optical filter—(3) and at least one of said photodiodes—(1, 2) oriented at pre-set angles.

4. (Currently Amended) The system of claim 3, ~~characterized in that~~ wherein said filter—(3) is adapted to be mounted on said frame—(100) with a selectively determined tilt.

5. (Currently Amended) The system of ~~either of claims 3 or 4, characterized in that~~ claim 3, wherein said frame—(100) is adapted to be mounted on said bench—(7) with a selectively determined tilt.

6. (Currently Amended) The system of claim 1, ~~characterized in that~~ wherein said beamsplitter arrangement (9, 10, 12) ~~has~~ includes an associated substrate—(11) for mounting said optical filter—(3).

7. (Currently Amended) The system of claim 6, ~~characterized in that~~ wherein said associated substrate—(11) includes a recessed portion adapted to receive said optical filter—(3).

8. (Currently Amended) The system of ~~either of claims 6 or 7, characterized in that~~ claim 6, wherein said associated substrate—(11) is L-shaped.

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9. (Currently Amended) The system of ~~any of claims 6 to 8,~~
~~characterized in that~~claim 6, wherein said associated
substrate ~~(11)~~ carries a metal pattern for mounting at least
one of said first ~~(1)~~ and second ~~(2)~~ photodetectors.

10. (Currently Amended) The system of ~~any of the previous~~
~~claims, characterized in that~~claim 1, wherein said
beamsplitter arrangement includes two partial beamsplitters
~~(9, 10)~~ arranged in a cascaded fashion to be traversed by the
radiation from said source ~~(LD)~~.

11. (Currently Amended) The system of ~~claim 6 and claim 10,~~
wherein said beamsplitter arrangement includes an associated
substrate for mounting said optical filter ~~characterized in~~
~~that~~and said associated substrate ~~(11)~~ is arranged straddling
said two beamsplitters ~~(9, 10)~~.

12. (Currently Amended) The system of ~~any of the previous~~
~~claims 1 to 9, characterized in that~~claim 1, wherein said
beamsplitter arrangement includes a double splitter ~~(12)~~.

13. (Currently Amended) The system of claim 12, ~~characterized~~
~~in that~~wherein said double splitter includes a single plate
polished as a 45° rhombic-prism.

14. (Currently Amended) The system of ~~claim 6 and any of~~
~~claims 12 or 13, characterized in that~~claim 12, wherein said
beamsplitter arrangement includes an associated substrate for
mounting said optical filter, and said associated substrate
~~(11)~~ ~~consists of~~includes a flat plate carrying said filter ~~(3)~~
in a position facing said double splitter ~~(12)~~.

15. (Currently Amended) The system of ~~any of the previous~~
~~claims, characterized in that it includes~~claim 1, wherein said

optical source comprises a laser source—(LD)—~~as said optical source.~~

16. (Currently Amended) The system of ~~any of the previous claims, characterized in that it includes~~claim 1, further comprising a lens—(8)—for collimating the radiation from said optical source—(LD).

17. (Currently Amended) The system of ~~any of the previous claims, characterized in that it includes~~claim 1, wherein said support bench comprises a silicon optical bench—(7)—~~as said bench.~~

18. (Currently Amended) The system of ~~any of the previous claims, characterized in that~~claim 1, wherein said filter—(3)—~~is~~comprises a periodic filter~~such as an etalon filter.~~

19. (New) The system of claim 18, wherein said periodic filter comprises an etalon filter